A world class system for **managing** official **Government content**, which will **verify and track** versions, assure **authenticity**, **preserve** content, and provide **permanent access.**

FDsys
an integrated digital content management system

U.S. Government Printing Office

FDsys Update

Long Term Sustainment of Digital Information for Science and Engineering

NIST Interoperability Week

April 24, 2007

Presentation Outline

- Project overview
- Release schedule and status
- Metadata and Content Packages
- Questions and Answers

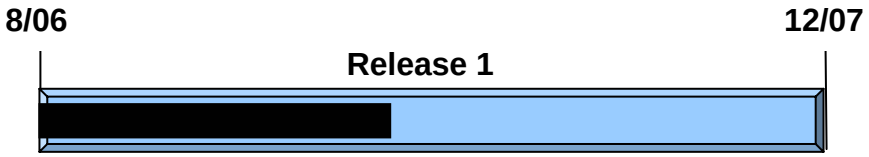
Challenges to GPO's Mission

- Access to government published information is now widely expected to be electronic.
- Digital information needs to be authentic and verified to be the correct version.
- Digital information needs to be available for access almost immediately.
- Information needs to be preserved, making it available for generations to come.

FDsys Capability Overview

- FDsys will automate the collection and dissemination of electronic information from all three branches of government.
- Information will be:
  - permanently available in electronic format
  - authenticated and versioned
  - accessible for Web searching, viewing, downloading and printing
  - available for conventional and on-demand printing

FDsys Release Schedule



Release 1:

- Accept digital information from all three branches of the Federal Government
- Update to GPO Access
- Information storage to support permanent public access
- Authentication of information received and delived
- Version tracking of publications

Release 2 and 3:

- Preservation processing of information to support access into the future
- Information harvesting tools to collect information on agency websites
- Automated version tools
- Extended storage to support harvested and legacy publications as required.
- Enhanced information authentication

FDsys Program Status

- Release 1B, the internal pilot, is in the development phase – detailed internal testing will start in late May.
- Initial Release 1B functionality has been demonstrated in early April.
- Beta testing of Release 1B is planned for this summer.
- The System Design Review for Release 1C, the first public launch, will be completed May 8th.

FDsys Digital Preservation

- Plan for hardware & infrastructure obsolescence
- Plan for software obsolescence
- Plan for possible failure modes of archives
- Design around digital preservation standards and best practices

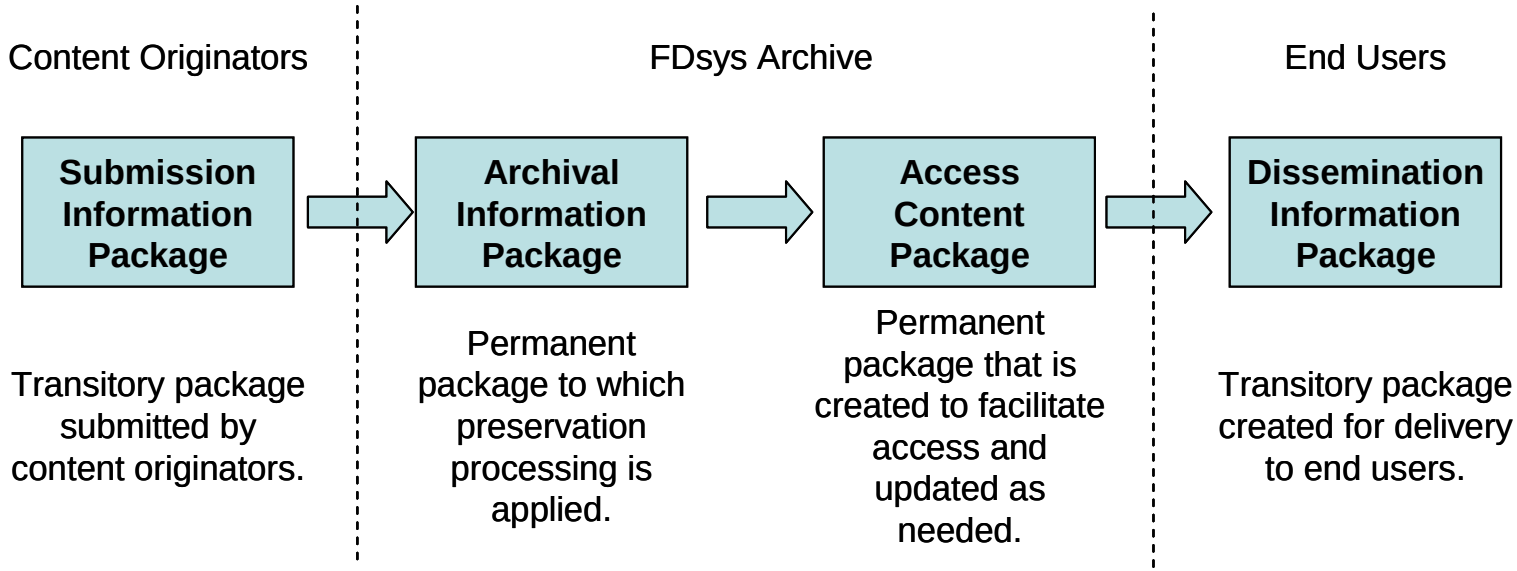
Metadata and Content Packages

- Data about data
- Popular Web sites have placed metadata in the public consciousness
  - Flickr
  - LibraryThing
  - Del.icio.us.

What is a package?

- Content and metadata – together forever
- FDsys follows the OAIS reference model.
- Design based on content packages, where metadata is aggregated in conceptual containers.

Information Package Lifecycle

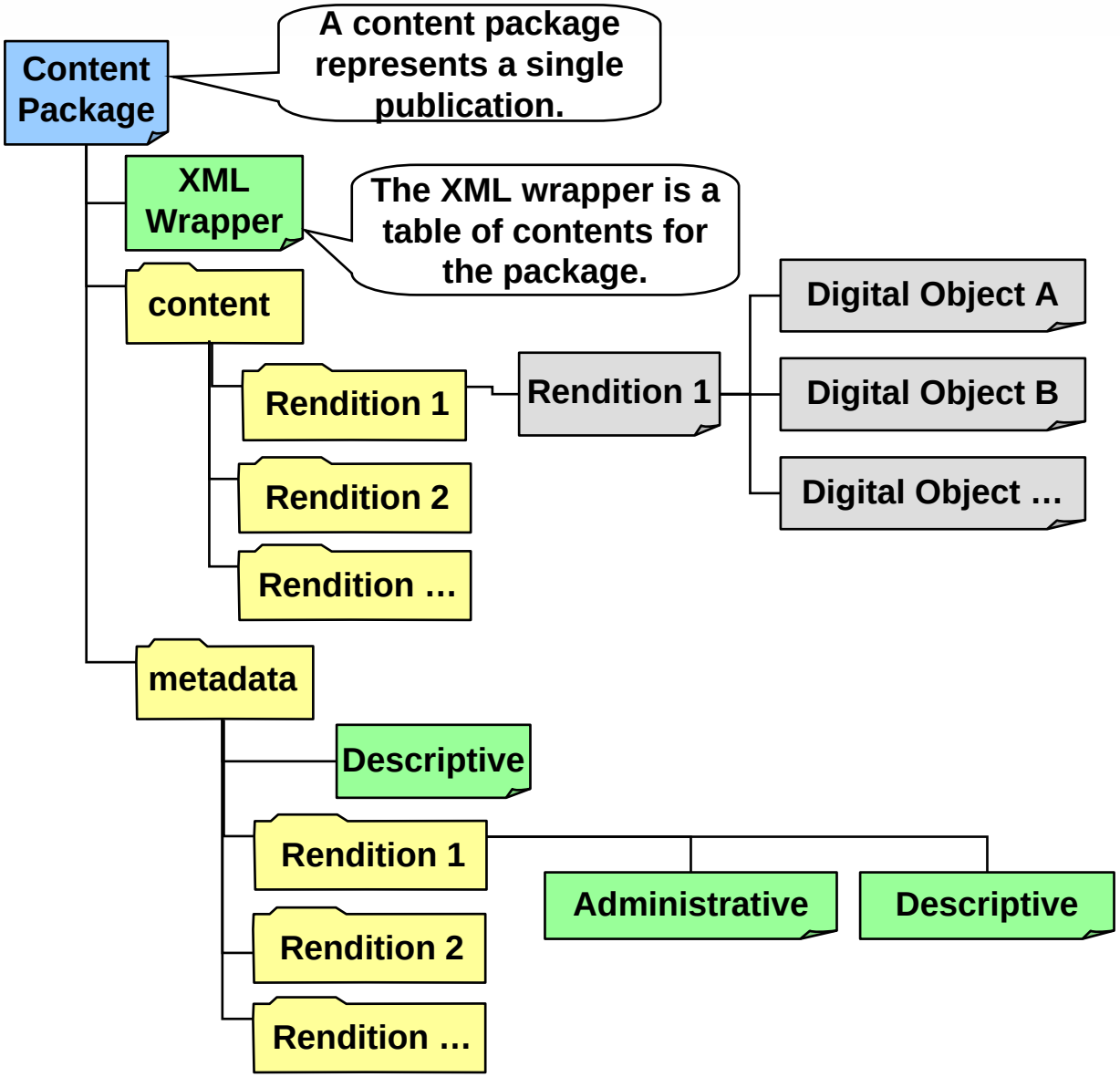


METS: Data about Metadata

- Standardized framework for holding and exchanging metadata
- Common practice in the preservation community
- Produced by the Library of Congress Standards Office and the Digital Library Federation
- Well understood and supported

Content Metadata

- METS and FDsys schema registry allow us to update or add new schemas.
- METS has places to reference the three types of metadata: descriptive, administrative, and structural.



Key:

- directory
- Digital Object Folders & Files
- XML File

Descriptive Metadata

- Descriptive metadata is information about the intellectual content, similar to a standard bibliographic record
- Each package in FDsys will have a MODS record
- Metadata in other schemas submitted to the system will be associated and used

Administrative Metadata

- Administrative metadata is information for handling, maintenance, and archiving of an object
- Each representation and each digital object in the system will have a PREMIS object entity file to record information necessary for preservation processes.
- PREMIS records chain of custody and provenance information
- Other schemas in the administrative metadata section will include schemas for technical information

A Layered Approach

- Packages have content at the core, and at any point it can be enriched with metadata
- A publication is submitted to FDsys with metadata
- In some cases, FDsys can extract metadata from content
- When a publication is cataloged, the MARC record is translated into MODS for FDsys

Questions and Answers

- Contact us by email pmo@gpo.gov
- Visit the FDsys Website http://www.gpo.gov/projects/fdsys.htm